

EDUCATION

Montana State University
Ph.D. in Computer Science; CGPA 3.85/4.0

Bozeman, MT, USA
Aug 2017 - Present

EXPERIENCE

Montana State University
Graduate Research Assistant · AMELIA Project (Funded by NSF)

Bozeman, MT
Aug 2018 - Present

- **Edge Computing:** I work on our proposed MicroLambda Edge Setup for AMELIA team for Real-time Machine learning and Mixed Reality applications.
- **Database and Pub-Sub:** I also work on the database setup for Lambda Invocation, efficiency physiological signal data storatation, publish-subscribe for computation output

Samsung R and D
Software Engineer · Gear 360

Dhaka, Bangladesh
Sep 2016 - Dec 2016

- **iOS 360 Gear Manager:** Worked on Gear 360 team to develop iOS App for Samsung 360 degree Camera. Particularly, I was working on the stitching engine and connectivity of 360 Camera

PROJECTS

Unstable Slope Management Program (Funded by Federal Highway Partners): Developing application for NPS, FLMA's, FHA geologists using React-Native (Mobile App) and PHP-Javascript

Innovation for Autistic Children: Built puzzle games with attractive graphics and animations to teach autistic children about Bangladeshi culture.

CSEDU Image Viewer and Editor-18.4.54: We implement image processing method (ex: Noise Detection and Reduction, Edge Detection, Gaussian blur, gray scaling technique, etc.) using C, C++ and OpenCV.

SKILLS

Languages: Python , C/C++ , NodeJS , Bash , Java , PHP

Technologies: Linux , Serverless , Containerization , Amazon AWS , Mininet , Docker , OpenFaaS

Systems: Redis , Postgres , MongoDB , Realm , RethinkDB , AWS (S3, SQS, DynamoDB) , Google Pub-Sub , Firebase

RESEARCH AREA

Distributed Edge Computing, Realtime ML-Edge Infrustracture, Edge-5G Scheduling, Serverless-Lambda Edge

PUBLICATIONS

MicroLambda Packetized Computation for 5G Mobile Edge Computing: Published in 3rd USENIX Workshop on Hot Topics in Edge Computing (HotEdge 20)

MR-DNS: Multi-Resolution Domain Name System: Published in International Conference on Internet and Distributed Computing Systems, 2019

Internet Data Budget Allocation Policies for Diverse Smartphone Applications: Published in EURASIP Journal on Wireless Communications and Networking, 2016 (Impact: 2.407)

Optimal allocation of 3G budget for smartphones running heterogeneous applications: Published in International Conference on Networking Systems and Security, Dhaka, 2016

ACHIEVEMENT

NSDI 2020 Student Travel Grant, BD-Sweden Trust Higher Study Travel Grant 2019